

## INTERNATIONAL SEARCH REPORT

Internat Application No

PCT/GB 30/03614

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 B32B1/08 F16L9/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B32B F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 323 556 A (UPONOR LTD) 30 September 1998 (1998-09-30) cited in the application page 7, paragraph 3 -page 8, paragraph 1 page 10, paragraphs 2-4 -page 15, line 24-28	1,6,8,9, 12-15,17
A	page 17, line 26,27; claims 1-4,7-19; example 1; table 1	11
A	EP 0 604 907 A (UPONOR NV) 6 July 1994 (1994-07-06) cited in the application column 2, line 31-49; claims 1,2,10,32-36	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

31 October 2003

Date of mailing of the international search report

14/11/2003

Name and mailing address of the ISA  
 European Patent Office, P.B. 5618 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Derz, T

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Information on patent family members

Internat Application No  
PCT/GB 30/03614

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2323556 A	30-09-1998	GB 2297137 A	24-07-1996
		AT 244844 T	15-07-2003
		AU 705621 B2	27-05-1999
		AU 4537896 A	07-08-1996
		CZ 9702268 A3	16-09-1998
		DE 69629013 D1	14-08-2003
		DE 804699 T1	25-10-2001
		WO 9622485 A1	25-07-1996
		EP 1321703 A2	25-06-2003
		EP 0804699 A1	05-11-1997
		FI 973028 A	08-09-1997
		GB 2297138 A , B	24-07-1996
		HU 9702402 A2	30-03-1998
		JP 10512656 T	02-12-1998
		NO 973309 A	16-09-1997
		PL 321369 A1	08-12-1997
		RU 2165047 C2	10-04-2001
		TR 9700661 T1	21-01-1998
		US 6016849 A	25-01-2000
EP 0604907 A	06-07-1994	FI 925897 A	29-06-1994
		AT 166609 T	15-06-1998
		AU 670835 B2	01-08-1996
		AU 5269093 A	07-07-1994
		CA 2112440 A1	29-06-1994
		DE 69318813 D1	02-07-1998
		DE 69318813 T2	24-09-1998
		DK 604907 T3	22-03-1999
		EP 0604907 A1	06-07-1994
		ES 2117089 T3	01-08-1998
		JP 7001542 A	06-01-1995
		US 5759461 A	02-06-1998